District: Town of Hopkinton

School Name: Elmwood Elementary School

Recommended Category: Preferred Schematic Date: April 19, 2023

Recommendation

That the Executive Director be authorized to approve the Town of Hopkinton (the "District"), as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing Elmwood Elementary School with a new facility serving grades 2-4 on an alternative site referred to as the Hayden Rowe Street site. MSBA staff has reviewed the Feasibility Study and accepts the District's Preferred Schematic.

District Information					
District Name	Town of Hopkinton				
Elementary Schools	Hopkinton Pre-School (PK)				
	Marathon Elementary School (K-1)				
	Elmwood Elementary School (2-3)				
	Hopkins Elementary School (4-5)				
Middle Schools	Hopkinton Middle School (6-8)				
High Schools	Hopkinton High School (9-12)				
Priority School Name	Elmwood Elementary School				
Type of School	Elementary School				
Grades Served	2-3				
Year Opened	1964				
Existing Square Footage	78,957				
Additions	1989 – a 2-story addition with additional classrooms, a				
	music room, and a large storage room				
	2000 – 2 modular classrooms added				
Acreage of Site	23-acres				
Building Issues	The District identified deficiencies in the following areas:				
	 Programmatic deficiencies 				
	Structural integrity				
	 Electrical systems 				
	 Plumbing systems 				
	 Fire Alarm systems 				
	- Envelope				
	Accessibility				
	In addition to the physical plant issues, the District				
	reported that the existing facility does not support the				
	delivery of its educational program the existing light				
	fixtures are inefficient and produce glare on marker boards				
	and computer screens, heat is uneven, with some rooms too				
	hot and others too cold and ventilation is below standard				
0::10:0	and is altogether lacking in some spaces.				
Original Design Capacity	Unknown				
2021-2022 Enrollment	622 students				
Agreed Upon Enrollment	Study Enrollment includes the following configurations:				

District Information					
	785 students (grades 2-3)				
	1,195 students (grades 2-4)				
Enrollment Specifics	Contingent upon the Board's approval of the Preferred				
	Schematic, the District will sign a Design Enrollment				
	Certification for 1,195 students in grades 2-4.				
Total Project Budget – Debt	Yes				
Exclusion Anticipated					

MSBA Board Votes	
Invitation to Eligibility Period	April 14, 2021
Invitation to Feasibility Study	December 15, 2021
Preferred Schematic Authorization	On April 26, 2023 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization on October 25, 2023
Feasibility Study Reimbursement Rate (Incentive points are not applicable)	44.05%

Consultants			
Owner's Project Manager (the "OPM")	The Vertex Companies, LLC (formerly known		
	as Compass Project Management, Inc.)		
Designer	Perkins Eastman Architects		

Discussion

The existing Elmwood Elementary School is a 78,957 square-foot two-story facility located on a 23-acre site. that currently serves students in grades 2-3. The original school building was constructed in 1964, with a two-story addition in 1989 and modular classrooms added in 2000.

The District's Statement of Interest ("SOI") identified numerous deficiencies in the existing facility associated with: programmatic deficiencies; outdated mechanical, electrical, and plumbing systems; building envelope; accessibility issues; inadequate maneuvering clearances; non-compliant controls, fixtures and amenities including but not limited to, lack of accessible food serving lines, stage, plumbing fixtures, signage, cabinetry and a lack of fully compliant egress and ingress; and inappropriate existing spaces for delivering the District's educational program.

As part of the Feasibility Study, the MSBA accepted the District's request to explore options that included relocating grade 4 students from the Hopkins Elementary School to the Elmwood Elementary School resulting in the following study design enrollments: 785 students in grades 2-3; and 1,195 students in grades 2-4.

In conjunction with its consultants, the District performed a comprehensive assessment of the existing conditions and the educational program and received input from educators, administrators, and facilities personnel. Based on the findings of this effort, the District and its consultants initially studied (8) preliminary options that include: (1) code upgrade option, (1) addition/renovation option, and (6) new construction options, as presented below.

Option	Description of Preliminary Options
BR	Code Upgrade/Base Repair for grades 2-3 with an enrollment of 785 students at the existing Elmwood Elementary School; with an estimated project cost of \$42.8 million.
AR-1	Renovation/Addition for grades 2-3 with an enrollment of 785 students at the existing Elmwood Elementary School; with an estimated project cost of \$102.7 million.
EE-1	New Construction for grades 2-3 with an enrollment of 785 students at the existing Elmwood Elementary School; with an estimated project cost of \$96.4 million.
EE-2	New Construction for grades 2-4 with an enrollment of 1,195 students at the existing Elmwood Elementary School; with an estimated project cost of \$123.8 million.
HR-1	New Construction for grades 2-3 with an enrollment of 785 students at the Hayden Rowe Street Site; with an estimated project cost of \$99 million.
HR-2	New Construction for grades 2-4 with an enrollment of 1,195 students at the Hayden Rowe Street Site; with an estimated project cost of \$126.4 million.
EM-1	New Construction for grades 2-3 with an enrollment of 785 students at the East Main Street Site; with an estimated project cost of \$100.8 million.
EM-2	New Construction for grades 2-4 with an enrollment of 1,195 students at the East Main Street Site; with an estimated project cost of \$128.4 million.

As a result of this analysis, the District determined that "Options EM-1 and EM-2" located at the East Main Street site would not be considered for further evaluation due to site concerns associated with proximity and generation of traffic, use of this property would require site acquisition. Additionally, the site is steeply sloped and would require significant cut and fill to terrace and balance the site and make it accessible.

Subsequent to the evaluation of preliminary options, the District further developed the following options:

- "Option EE-1" was further developed into two new options referred to as "Options EE-3 and EE-5".
- "Option EE-2" was further developed into two new options referred to as "Options EE-4 and EE-6".
- "Option HR-1" was further developed into four new options referred to as "Options HR-3E, HR-3W, HR-5E, and HR-5W".
- "Option HR-2" was further developed into four new options referred to as "Options HR-4E, HR-4W, HR-6E, and HR-6W"

Additionally, the District developed two new options referred to as "Options HR-7E and HR7W".

MSBA staff and the District agreed to explore the following (16) options for further development and consideration in the final evaluation and development of preliminary design pricing as presented below, including: (1) code upgrade option, (1) renovation/renovation option, and (14) new construction options.

Summary of Preliminary Design Pricing for Final Evaluation of Options

Option (Description)	Total Gross Square Feet	Square Feet of Renovated Space (cost*/sq. ft.)	Square Feet of New Constructio n (cost*/sq. ft.)	Site, Building Takedown, Haz Mat. Cost*	Estimated Total Construction ** (cost*/sq. ft.)	Estimated Total Project Costs
Option BR: Code Upgrade/ Base Repair for grades 2-3 at the existing Elmwood Elementary School.	78,957	78,957 \$375/sq. ft.	N/A	\$13,242,587	\$42,830,000 \$542/sq. ft.	\$83,000,000
Option AR-1: Addition/ Renovation for grades 2-3 at the existing Elmwood Elementary School.	122,406	22,194 \$405/sq. ft.	100,212 \$836/sq. ft.	\$16,421,980	\$109,204,091 \$892/sq. ft.	\$169,000,000
Option EE-3: New Construction for grades 2-3 at the Elmwood Elementary School site.	126,340	N/A	126,340 \$695/sq. ft.	\$15,080,772	\$102,839,501 \$814/sq. ft.	\$138,000,000
Option EE-4: New Construction for grades 2-4 at the Elmwood Elementary School site.	176,106	N/A	176,106 \$659/sq. ft.	\$15,275,954	\$131,298,102 \$746/sq. ft.	\$176,000,000
Option EE-5: New Construction for grade 2-3 at the Elmwood Elementary School site.	126,340	N/A	126,340 \$731/sq. ft.	\$15,382,748	\$107,685,020 \$852/sq. ft.	\$167,000,000
Option EE-6: New Construction for grades 2-4 at the Elmwood Elementary School site.	176,106	N/A	176,106 \$675/sq. ft.	\$15,564,382	\$134,370,983 \$763/sq. ft.	\$201,000,000
Option HR-3E: New Construction for grades 2-3 at the Hayden Rowe Street site.	126,340	N/A	126,340 \$702/sq. ft.	\$18,284,509	\$107,012,399 \$847/sq. ft.	\$138,000,000
Option HR-3W: New Construction for grades 2-3 at the Hayden Rowe Street site.	126,340	N/A	126,340 \$692/sq. ft.	\$18,226,305	\$105,675,288 \$836/sq. ft.	\$136,000,000

Option (Description)	Total Gross Square Feet	Square Feet of Renovated Space (cost*/sq. ft.)	Square Feet of New Constructio n (cost*/sq. ft.)	Site, Building Takedown, Haz Mat. Cost*	Estimated Total Construction ** (cost*/sq. ft.)	Estimated Total Project Costs
Option HR-4E: New Construction for grades 2-4 at the Hayden Rowe Street site.	176,106	N/A	176,106 \$664/sq. ft.	\$18,169,538	\$135,138,874 \$767/sq. ft.	\$174,000,000
Option HR-4W: New Construction for grades 2-4 at the Hayden Rowe Street site.	176,106	N/A	176,106 \$662.5/sq. ft.	\$17,132,162	\$133,801,762 \$760/sq. ft.	\$172,000,000
Option HR-5E: New Construction for grades 2-3 at the Hayden Rowe Street site.	126,340	N/A	126,340 \$694/sq. ft.	\$18,292,473	\$105,975,873 \$839/sq. ft.	\$136,000,000
Option HR-5W: New Construction for grades 2-3 at the Hayden Rowe Street site.	126,340	N/A	126,340 \$684/sq. ft.	\$18,233,745	\$104,638,762 \$828/sq. ft.	\$135,000,000
Option HR-6E: New Construction for grades 2-4 at the Hayden Rowe Street site.	176,106	N/A	176,106 \$658/sq. ft.	\$18,175,164	\$134,045,427 \$761/sq. ft.	\$173,000,000
Option HR-6W: New Construction for grades 2-4 at the Hayden Rowe Street site.	176,106	N/A	176,106 \$656/sq. ft.	\$17,137,145	\$132,708,316 \$754/sq. ft.	\$171,000,000
Option HR-7E:*** New Construction for grades 2-4 at the Hayden Rowe Street site.	176,106	N/A	176,106 \$664/sq. ft.	\$18,169,538	\$135,138,874 \$767/sq. ft.	\$174,000,000
Option HR-7W: New Construction for grades 2-4 at the Hayden Rowe Street site.	176,106	N/A	176,106 \$663/sq. ft.	\$17,132,162	\$133,801,762 \$760/sq. ft.	\$172,000,000

^{*} Marked up construction costs

The District has selected "Option HR-7E" as the Preferred Schematic to proceed into Schematic Design. The District selected "Option HR-7E" because it best meets the needs for the District's educational program, provides a 3-wing building layout which offers opportunities for small communities within a large building and provides options to transition grades through the building by wing or by floor. Additionally, the location of the 3-wings on a single side of the building allows for better definition of the public and private sides of the building, including private

^{**} Does not include construction contingency

^{***}District's Preferred Schematic

outdoor space between wings and offers the preferred separation of the cafeteria and the gymnasium to reduce noise and congestion related to those spaces compared to clustering them together.

The following (8) options were designed for grades 2-3: "Options BR, AR-1, EE-3, EE-5, HR-3E, HR-3W, HR-5E, and HR-5W" and were not selected because the District determined its preferred grade configuration was grades 2-4. The grades 2-4 configuration also results in additional cost advantages of addressing three grades of enrollment and reduces the cost for other anticipated school projects. Additionally, grade configuration 2-4 would have fewer transitions for students compared to the 2-3 configuration and would increase opportunities for extracurricular activities and reduce bus routes.

"Options EE-4 and EE-6" were not selected by the District because these options require phased construction resulting in a longer construction duration and additional costs. The District indicated there is no available swing space, which would result in significant disruption to ongoing education during construction. Additionally, the Elmwood Elementary School site would have traffic challenges.

Although "Options HR-4E and HR-6E" meet the needs of the District's educational program, they were not selected by the District because these options offer less flexibility than the 3-wing building layout and these options do not adapt as cleanly to a three grade by floor or wing model. Also, the location of these options on the site requires more running for utilities and roadways.

"Options HR-4W, HR-6W, and HR-7W" were not selected by the District because these options increase the separation of a three-story school to the neighbors and would not allow preserving the land between the proposed Elmwood Elementary School, existing Hopkins School and the existing Marathon Elementary School for future town use.

The District presented its proposed Preferred Schematic to the MSBA Facilities Assessment Subcommittee ("FAS") on March 29, 2023. At that meeting, members of the FAS discussed the following items: the importance of professional development and collaboration opportunities for all teachers across disciplines; considerations associated with the integration and implementation of project based learning and interdisciplinary curricula, including resources, staffing and continued professional development; the MSBA's "Review and Recommendations of Best Practices for K-12 STEM Learning Spaces" report and Staff Recommendation for 2018 Science/Technology/Engineering Area Guidelines as it relates to staffing of STE rooms, classroom sinks and storage; appreciation of the overall building design, massing and scale of the academic neighborhoods for young learners; inclusion of a full-time Librarian; consideration of extending the proposed canopy to provide sheltered access to the building for individuals with limited mobility; distribution of Special Education spaces and DESE submittal process; site circulation and user experience of entry to the building; proximity of wetlands and opportunities for outdoor learning; and, clarification of setbacks and site constraints. as it relates to staffing of STE rooms, classroom sinks and storage; appreciation of the overall building design, massing and scale of the academic neighborhoods for young learners; inclusion of a full-time Librarian; consideration of extending the proposed canopy to provide sheltered access to the building for individuals with limited mobility; distribution of Special Education spaces and DESE submittal process; site circulation and user experience of entry to the building; proximity of wetlands and opportunities for outdoor learning; and, clarification of setbacks and site constraints.

MSBA staff reviewed the conclusions of the Feasibility Study and all other subsequent submittals with the District and found:

- 1) The options investigated were sufficiently comprehensive in scope, the approach undertaken in this study was appropriate, and the District's Preferred Schematic is reasonable and cost-effective and meets the needs identified by the District.
- 2) The District has submitted an operational budget for educational objectives and a capital budget statement for MSBA review.
- 3) The District's Special Education submission will be subject to final review and approval by the Department of Elementary and Secondary Education as part of the Schematic Design submittal, which is prior to executing a Project Scope and Budget Agreement.
- 4) Subject to Board approval, the MSBA will participate in a project that includes spaces that meet MSBA guidelines, except for variations previously agreed to by the MSBA. All proposed spaces will be reviewed during the Schematic Design phase.
- 5) As part of the Schematic Design phase, the MSBA will continue to work with the District to better understand the total area associated with health and physical education and how the space serves the student population and the renovation of the existing facility.
- 6) As part of the Schematic Design phase, the District will work with the MSBA to determine a mutually agreeable methodology to differentiate eligible costs from ineligible costs.

Based on the review outlined above, staff recommends that the Town of Hopkinton be approved to proceed into Schematic Design to replace the existing Elmwood Elementary School with a new facility serving grades 2-4 on the Hayden Rowe site.